Volunteer Firemen

APRIL

1940

NATIONAL FIRE PROTECTION ASSOCIATION
60 Batterymarch Street INTERNATIONAL Boston, Massachusetts

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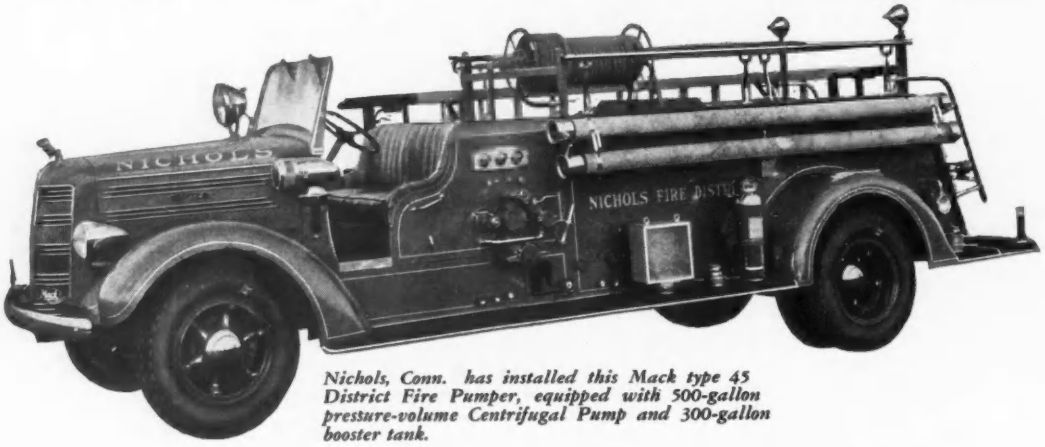
FOR SMALLER COMMUNITIES AND FIRE DISTRICTS



Nichols, Conn. has installed this Mack type 45 District Fire Pumper, equipped with 500-gallon pressure-volume Centrifugal Pump and 300-gallon booster tank.

Mack type 45 District Fire Pumper serving Winsted, Conn. Equipped with 100-gallon booster pump and 100-gallon booster tank.

Mack PRESENTS THE DISTRICT FIRE PUMPER

Here's big news for smaller communities and fire districts! Apparatus designed specifically to do their type of fire fighting—built entirely by Mack to the highest quality standards; yet priced to fit limited budgets.

The new Mack District Fire Fighter models range in pumping capacity from 100 to 500 gallons per minute, and are equipped with booster tanks carrying 100 gallons of water or more. As shown in photos above, the District Fire Pumper comes with open or inclosed cab.

In efficiency, in dependability and in stamina, these new Macks are equipped to do an outstanding job for *your* community. Write today for full details and specifications.

MACK MANUFACTURING CORP., NEW YORK, N.Y.

FIRE ENGINE DIVISION

Volunteer Firemen

National Fire Protection Association

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DURING April, and May, too, fire departments will have many fires to fight like the brush fire shown on the front cover.

ONE of the many places from which we received a copy of the annual report of the fire department is Dover, Delaware. That community was able to cut the number of runs made in 1939 to 105 as against 130 in previous years. This was done principally by reducing the number of chimney fires. During the year the fire department had waged a successful campaign for cleaning chimneys.

ON pages 8 and 9 of this issue is a story which discusses how automatic sprinklers may be used to solve the problem of fire-trap schools. The installation of automatic sprinklers is not, of course, the only means of securing school fire safety. Though often expensive, it is possible to secure a high degree of safety by major structural changes. Automatic sprinklers, however, are of importance because they may be installed in an existing building without interfering with its use and give the maximum safety practical to obtain in an existing building. There are other measures which can be taken also. Automatic fire alarm systems may be readily installed in many school buildings which will give prompt notification of fire and enable the fire department to get there while the fire is small. All schools should have some sort of manual fire alarm system.

More than usual, it appears that there have been many total-loss school fires this winter. Here are two which are typical.

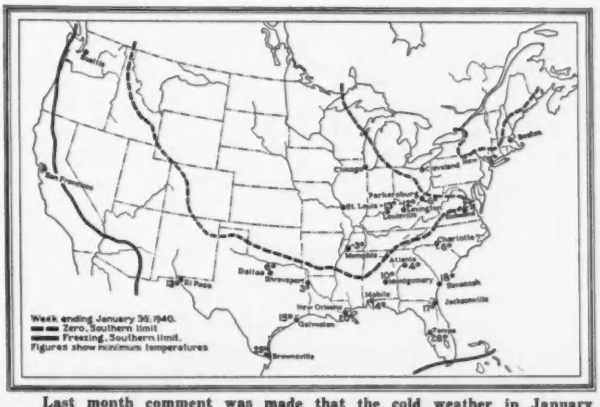
Between the villages of Sanford and Springvale, Maine, about a mile from the fire stations in each village, is a two-story brick school building. An imposing new structure, it looked impervious to fire, so much so that a request on the part of the fire department that the school be equipped with an automatic fire alarm system was turned down by the town officials. The town officials who made that decision probably do not feel very happy about it as the fire which occurred might easily have been controlled had it not been for late discovery.

It was first seen at one o'clock on a zero-cold morning by a nurse in a hospital a mile and a quarter away. She saw the smoke from the fire and thought it was clouds. However, half an hour later, when she looked again, there were flames in the sky and she telephoned the fire department. The fire was also discovered by a number of other persons who were passing in automobiles. These people wasted time by driving to the fire station to report the fire instead of stopping and pulling one of several street fire alarm boxes past which they had to drive in order to reach the fire station. By the time four volunteer fire departments had received notice of the fire and arrived there the building was practically a total loss of approximately $200,000.

A repair man and a janitor were replacing a broken window before school opened one morning in the Public Grade and High School Building at Sycamore, Ohio. They noticed paint was blistered on the attic ceiling and investigating found a fire in woodwork in the attic. There was no fire fighting equipment in the building. The men could do nothing about the small fire as they waited for the fire department. When the fire department arrived the men connected the pumper to the nearest hydrant. Finding it frozen, they had to move to another one, 900 feet away. By the time the water was turned on it was impossible to fight the fire from inside of the building. The fire consumed the combustible portions of the building, leaving only the brick shell. The loss was $100,000.

THE estimated U. S. fire loss for February, 1940, according to the National Board of Fire Underwriters is $34,410,250. This figure is based on notices of incurred loss received by companies members of the board, plus an allowance for unreported and uninsured losses. Losses for the first two months of 1940 are $13,752,000 ahead of the losses for the same two months of 1939. The following table shows the losses for each month of 1939 and for the first two months of 1940:

	1939	1940
January	$27,615,316	$36,260,650
February	29,303,520	34,410,250
Total 2 months	$56,918,836	$70,670,900
March	30,682,168	. . .
April	27,061,522	. . .
May	27,031,700	. . .
June	24,190,700	. . .
July	22,468,304	. . .
August	22,800,500	. . .
September	22,837,250	. . .
October	24,300,500	. . .
November	27,248,160	. . .
December	27,959,200	. . .
Total 12 months	$313,498,840	. . .



Last month comment was made that the cold weather in January swelled the normal fire losses of that month. Here's a picture of that cold spell compiled from U. S. Weather Bureau data by the Factory Mutual Record.

A CLEAN-UP Campaign in the spring performs about the same function as Fire Prevention Week does in the fall. In addition to promoting fire prevention, it also promotes health, sanitation, and accident safety by getting rid of the winter's rubbish and other needless accumulations of combustibles. Because such a campaign does so much for the well-being of a community, fire departments find that it isn't a hard job to convince local organizations and public-spirited individuals that one week in the spring should be devoted to this work.

Regardless of the exact week chosen, the campaign can do much to reduce the toll of life and property needlessly sacrificed to fire each year. There is a lot of truth in the cleanup slogans "A Clean House Seldom Burns" and "A Bit of Caution Saves a Fortune."

Just cleaning up, however, is not sufficient for permanent safety of property. Repairing, painting, planting, and beautification all tend toward greater safety and encourage respect for property so that it will be much less likely to again become a depository for rubbish and litter. Unprotected wood has a tendency to weather and dry out until it becomes like tinder. Paint keeps wood in good condition. In order to paint, it is first necessary to clean up.

The organization of a Clean-Up Campaign is described in a new pamphlet prepared by the National Fire Protection Association Committee on Fire Prevention and Clean-Up Campaign. This has been mailed to all fire departments which are members of the Volunteer Firemen's Section. Attractive posters and other literature for use in the campaign are also available from the N.F.P.A. (See page 13). Publicity material for use in local newspapers may be obtained by writing to the National Clean-Up and Paint-Up Campaign Bureau, 2201 New York Ave., N.W., Washington, D. C.

You're Invited to National Meeting for Volunteer Firemen in Atlantic City May 9

THE Volunteer Firemen's Section of the National Fire Protection Association is the only national organization devoted to the problems of the volunteer firemen and the volunteer fire department. It numbers over 15,000 firemen in its membership from all over the United States and Canada. In numbers alone, this is a great group of men devoted to a common purpose.

The 1940 annual meeting of the National Fire Protection Association will be held this year May 8-11 at Chalfonte-Haddon Hall Hotel, Atlantic City, N. J. It will feature a meeting of the Volunteer Firemen's Section. All volunteer or part paid firemen are invited, whether members or not.

Atlantic City is a peculiarly advantageous location for this meeting. Nearly half of the volunteer firemen of the country are located within a day's drive of Atlantic City, which is expected to assure a representative gathering.

The opening session of the N.F.P.A. meeting will be held Wednesday evening, May 8. The program has been so arranged that the entire day Thursday, May 9, will embrace a program of special interest to volunteers:

Take action at the regular meeting of your company this month. Appoint one of your members to represent your company or department at this meeting.

Volunteers' Program

Annual Meeting, National Fire Protection Association, Chalfonte-Haddon Hall Hotel, Atlantic City, N. J., May 8-11, 1940.

Thursday, May 9

9:45 A. M. VOLUNTEER FIREMEN'S FORUM

Presiding:

Dr. David J. Price, U. S. Department of Agriculture, Vice-President, N.F.P.A., and Chairman, Committees on Farm Fire Protection and Dust Explosion Hazards.

Opening Address:

The National Importance of Volunteer Fire Departments by Horatio Bond, Chief Engineer, N.F.P.A., and Managing Editor of VOLUNTEER FIREMEN.

Address:

How Firemen's Training Work Can Be Organized by George L. Townsend, Acting Principal, Public Service Institute, Pennsylvania State Department of Public Instruction.

Discussion of firemen's training.

Address:

The North Carolina State Volunteer Fire Department by Sherwood Brockwell, State Fire Marshal, North Carolina, and Chief of the North Carolina State Volunteer Fire Department.

Discussion of the problems of outside aid and mutual aid.

2:30 P. M. FIRE WASTE FORUM

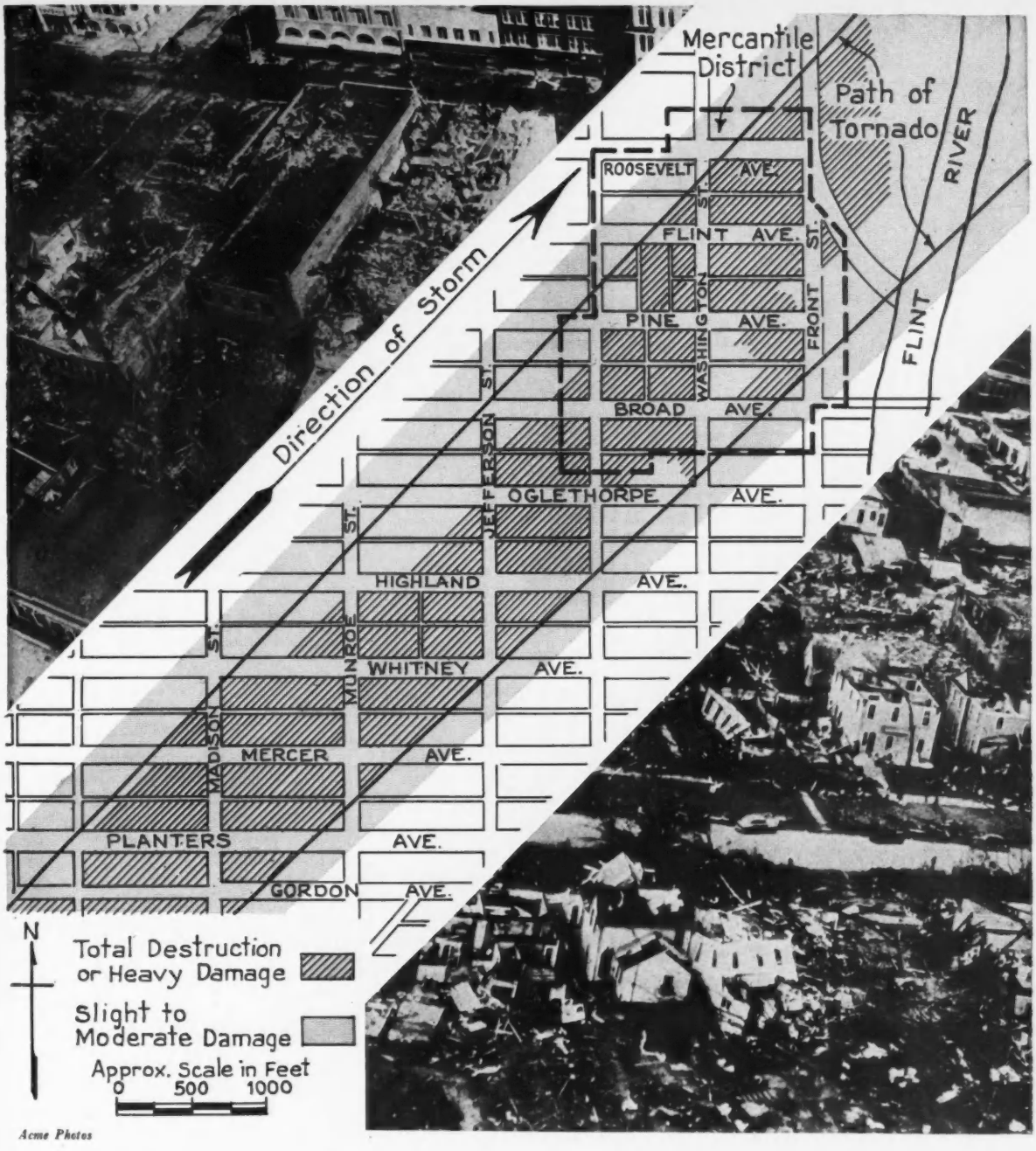
A discussion of the general and national problem of the fire waste will be presented by a group of distinguished national authorities.

8:30 P. M. "FIRES IN REVIEW—1940" MOTION PICTURE PROGRAM

A program sponsored by the N.F.P.A. Committee on Visual Education, Richard E. Vernor, Chairman. Pictures of important fires of the past year will be shown—also other new fire films.

WHILE this program has been arranged for the convenience of volunteers who may wish to put in just the one day, those coming are invited to attend other sessions of the meeting. The Fire Marshals' Section will meet Tuesday and Wednesday and provide sessions of great interest to firemen whose duties include inspection work or investigation of fires. The Friday and Saturday sessions will be devoted to hearing numerous technical committee reports. Firemen interested will be welcome at all of these sessions.

Send your name and that of your department to the Executive Office. A program will be mailed to you as soon as complete information is available.



Acme Photos

Albany, Georgia, Noted for Its Fire Prevention Work, Hit by Tornado

ALBANY, Georgia, is probably best known as the little city which achieved national fame for its accomplishments in fire prevention. Five times in succession from 1926 to 1931, it was winner for cities in its population class of the Fire Waste Contest sponsored by the U. S. Chamber of Commerce. In most other years it has been in the "honor city" class in that contest. It is ironical that after these years of successful work of the fire department to avoid fires, the town should be razed by another type of disaster—a tornado.

A baby twister of Herculean violence cut a swath through the center of the city on February 10. Excepting a few buildings saved by the kind of freak common to windstorms, the tornado pulled up, tore down, or blew away every structure in its path. This can be seen from the above map prepared by engineers of the South-Eastern Underwriters Association. Eighteen people were killed and over 400 injured. The property loss was about $2,500,000.

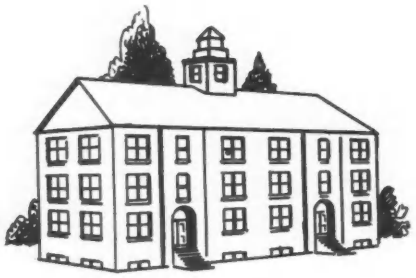
In this, as in all disasters, the fire department had to bear the first brunt of rescue work. Some idea of the problem with which they were faced is indicated by the fact that the tornado took about two minutes to enter the city in a low-valued negro residential area, roll through a more expensive white residential area, scatter the mercantile district and depart over the flats of the Flint River. Fire department patrols prevented fires from following the disaster.

FOR THE FIRE-TRAP SCHOOL:

Automatic Sprinklers

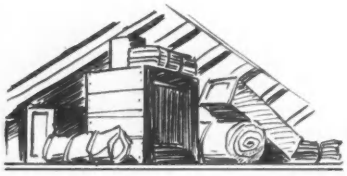
A Practical Means Available to School Authorities to Offset Fire and Life Hazards in Existing School Buildings

MOST schools are fire traps. Take this typical one, for example:

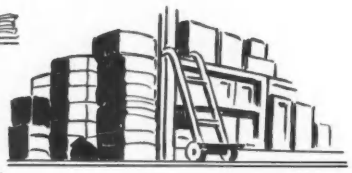


There are lots of things about a school to make quick, hot and smoky fires.

These things will be there no matter how "fireproof" you think the school may be.

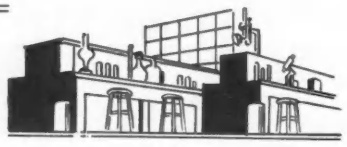


Storage Rooms



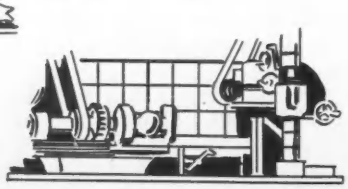
Domestic Science Room

Laboratories



Waste Paper Baling

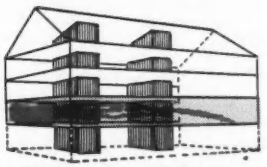
Shops



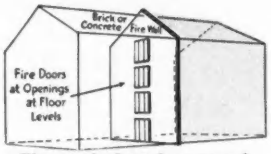
THE school may also be a fire trap because of its arrangement.

Fire can travel from floor to floor through stairways and other vertical openings.

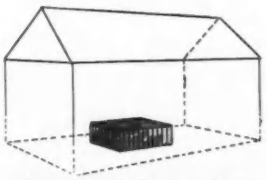
In a fire trap school fire can spread unhindered from floor to floor and from one end of the building to the other.



Enclosing the stair shafts and other vertical openings holds a fire to one floor of the building.



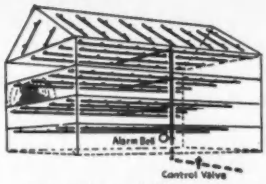
Fire can be kept from spreading from one part of a building to another by fire walls. If the building is cut up into separate parts, a fire is not likely to destroy the whole building at once.



Sometimes the heating plant is cut off from the rest of the building by a fire-resistive enclosure. This is a good idea as many fires start in the heating plant.

THE surest way to keep fires small is to equip the building with an automatic sprinkler system. This consists of pipes along the ceilings by means of which water is carried to every part of the building.

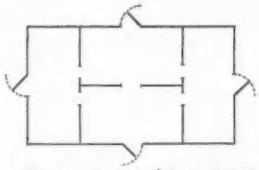
A fire will melt fusible members of sprinkler "heads" and release the water to put out the fire.



Automatic sprinklers put out fires while they are small and protect against the total destruction of the building.

School buildings represent investments of large sums of money. If at present the building is so arranged that it can be completely destroyed by fire, the installation of sprinklers will provide more assurance that the building will not be destroyed than any one other practical measure which can be adopted.

ONE-STORY schools may be arranged to have no appreciable hazard to life from fire regardless of construction.

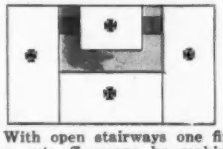


All rooms can be arranged with exits direct to the outside.

Multiple-story buildings are less safe as stairways must be relied upon for exits. Schools with auditoriums on upper floors (of which there are many) are usually unsafe.

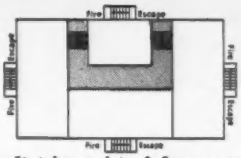
Ground conditions or grading may make a building one or more stories higher (so far as occupants of certain rooms are concerned) than its apparent height at the front.

Stairways are the principal hazard to life. They permit smoke and fire to spread from floor to floor and cut off escape.



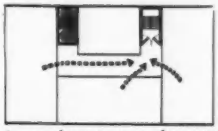
With open stairways one fire can cut off escape by making all stairways inaccessible. Persons in the rooms marked by a cross cannot get out.

If the only available stairs are to be cut off in case of fire, other means of exit must be provided. One of these is to provide fire escapes—stairs on the outside of the building.



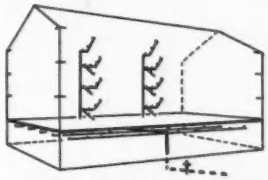
It takes a lot of fire escapes to make a building with open stairways safe. Fire escapes are a make-shift at best. They are seldom provided sufficient in number, are often flimsily constructed affairs, with narrow and steep stairs and frequently are actually dangerous to use.

All stairways should be properly enclosed with substantial partitions and self-closing doors.



An enclosure around a stairway holds a fire until people can get out by other available stairs or exits.

Automatic sprinklers are often used to offset the hazard of open stairways in existing buildings.

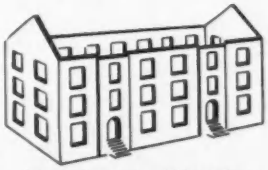


Sprinklers installed in the basement and stairways reduce life hazard by stopping while small fires which otherwise would cut off exits.

THE material used in the construction of a building is a factor of less importance in determining its fire safety than the factors of arrangement and sprinkler protection. If the building is properly arranged or protected by automatic sprinklers, it will have a high safety rating even if of combustible construction.

However, to the extent that combustible materials are used in the construction, the building is a fire hazard.

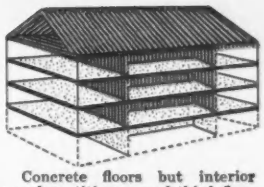
The fire protection engineer sees the construction of an ordinary school building like this:



Here's the part which will not burn—the outside brick shell.

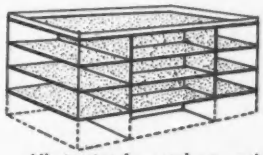
Inside a forest of wood—highly combustible.

Here's what many school authorities will be offered as a "fireproof" building.



Concrete floors but interior wood partitions, wood third floor ceiling, and wood attic and roof construction. This is hardly a "fire - proof" building with so large a proportion of the structure combustible.

Compare the foregoing falsely labeled "fire-proof" building with a building the construction of which is really fire-resistive. (Note that "fire-resistive" is the term preferred to "fireproof.")

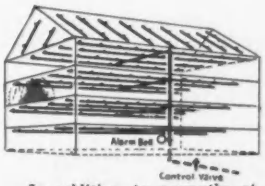


All structural members not only will not burn but will resist damage and distortion in a fire of any intensity or duration which may reasonably be expected in a school.

But even in the average fire-resistive building there may be considerable combustible material.

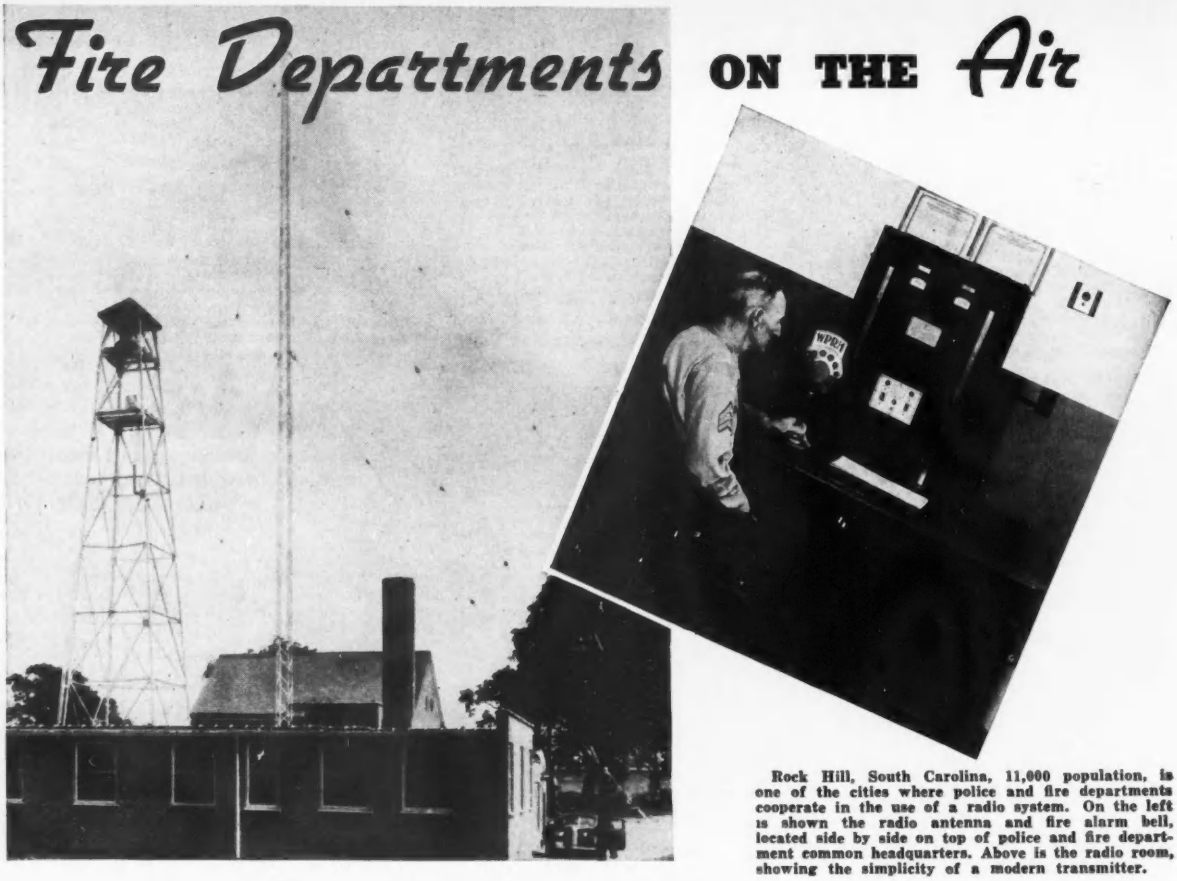
Doors, window and trim are usually of wood. Wooden furniture is used and many furnishings are combustible.

Automatic sprinklers offer a practical means of offsetting the hazard of combustible building material. If any substantial part of the building is of combustible construction this alone is justification enough for providing sprinkler protection.



In addition to promptly attacking a fire, the sprinkler system is arranged to give an alarm to warn the occupants of a building (arrangements to report the alarm at a supervisory central station or direct to the fire department may also be made).

Fire Departments ON THE Air



Rock Hill, South Carolina, 11,000 population, is one of the cities where police and fire departments cooperate in the use of a radio system. On the left is shown the radio antenna and fire alarm bell, located side by side on top of police and fire department common headquarters. Above is the radio room, showing the simplicity of a modern transmitter.

COOPERATIVE use of police radio equipment is streamlining the communications systems of many fire departments. Over one-way radio, fire officials find speed without hurry in detailing companies to fires, ordering follow-up or "covering" maneuvers by other companies, and recalling companies or shifting equipment and men from fire to fire. The officer in charge on the fire ground may be summoned to a telephone or municipal alarm box if his answer or confirmation is needed.

If the city has a two-way system, fire department headquarters can maintain steady contact with companies in the field and in stations. Back-road brush fires are brought into as close coordination with headquarters as blazes in mid-city buildings. This is a great convenience. Two-way radio is a vital necessity of departments having a marine division. No satisfactory substitute means for directing fire boats to waterfront alarms or recalling them from half way when it is found they aren't needed has been developed.

Against such stubborn advantages it might seem that no other form of fire department communications could hold up its head against radio. Maybe none could if it weren't for one important thing that radio doesn't do. It doesn't provide citizens with means of reporting a fire. The municipal alarm system is the most efficient equipment for this purpose. It minimizes the chances that Mister citizen will get confused and pass his confusion on to the firemen. Though telephone is a valuable accessory, and more than three quarters of the alarms in most cities are now being transmitted by it, fire authorities continue to urge the use of a municipal system where possible.

MOST fire departments, whether radio-equipped or not, continue to rely on their wired systems for vital communications between fire grounds and headquarters, whenever it is convenient to do so. Perhaps this is because they fear that radio messages may be lost or confused.

Many fire departments using radio are doing so through cooperation with radio-equipped police forces. Only those having marine divisions have been able to convince the Federal Communications Commission of the need for frequency allotments. Air waves suitable for practical communications are not unlimited, and it is the official opinion of the FCC that fire departments not having marine divisions can share the police system. Such cooperative use has proved feasible in practically every city where it has been tried.

Police departments in 242, or 78 per cent, of the cities over 30,000 population now use radio. In 158 the systems are two-way. Among the many fire departments using the two-way police radio are those in Austin, Texas, and Schenectady, New York. The use of the two-way radio in Austin, Texas, reduced by 37 per cent the actual time that fire companies were out of service. While the police radio system is used, broadcasts to fire officials are made direct from the fire alarm office which is connected by means of telephone wires to the police broadcasting station. The system is so interlocked that neither department may interfere with the other. Warning lights and monitor speakers inform each department when the other is using the system. Means are also provided to signal the department using the system when an emergency arises. The necessary equipment for use by the fire department was built by police radio technicians and the entire amplifier system cost only $375, and each of the high-frequency transmitters $75.

SCHENECTADY, New York, in 1939, at a cost of $1,468 installed two-way

radio sets in the cars of the fire chief and the deputy chief. Each car also has a loud speaker through which the radio is switched if neither the officers nor the chauffeur is at the car. This equipment has proved so valuable in receiving messages from the signal station in the police department and in directing the work of firemen that two-way sets are to be installed this year in the third officer's car and in the rescue squad's truck.

THE use of low-power two-way portable systems is another development. Such equipment was first used in fighting forest fires in 1930, and now is employed for this use in all parts of the country. The fire departments of Chicago and Portland, Oregon, have made experimental use of small portable radio telephone equipment suitable for use in directing apparatus at the scene of the fire. Such portable sets were used during the $3,000,000 fire that destroyed five Chicago grain elevators and killed nine men. One was placed in a police two-way radio car, and the other used at remote parts of the fire area. Communications were sent first from portable to portable and then relayed to the police radio room and transmitted again to fire department headquarters. A fireboat was directed to its position at the fire by this system. Ambulances and tank trucks of gasoline for pumpers were summoned. Portable sets thus showed possibilities of being valuable accessories for coordinating fire fighting at very large fires. An extensive canvass of midwestern cities under 250,000 population, however, showed the fire chiefs to be almost unanimous in agreeing that the need for such equipment was extremely limited.

To date, fire department use of radio has been largely confined to the larger cities. Few volunteer departments are located in towns having sufficient resources to equip their police department with a transmitter and radio-equipped cruisers. It is improbable that many small communities will ever do so. The limited number of frequencies available for this sort of work automatically limits the number of stations in most areas to far less than the number of towns.

THERE appears a possibility, however, that many departments may in future be served by one headquarters station. The radio equipment for police systems is improving rapidly, both in reliability and in covering power. Volunteer departments near a radio-equipped city should soon find it possible to communicate with the city and relay messages to other suburban departments through these facilities. Thus the chief of a volunteer department might use a two-way radio at rural and forest fires, where other communications may be lacking, to broadcast his requests for more apparatus. He could inform the city police dispatcher of his needs, and the dispatcher might then summon the necessary aid from adjoining towns by telephone.

The number of departments which could thus operate on one system would be limited only by the point where there were more urgent messages than the one operator could handle.

THE FIRST CALL IN RESUSCITATION
THE LAST WORD IN SUCCESSFUL RESULTS

The H-H INHALATOR

The world's most popular and widely-used instrument for resuscitation of persons overcome by gas; electric shock; drowning and similar hazards is the H-H Inhalator—compact, portable, safe and easily operated. Approved by the Association of Police and Fire Surgeons, the American Gas Association, and officially accepted by the Council on Physical Therapy of the American Medical Association, the H-H Inhalator is the finest aid to respiratory rescue the firemen can employ.

Let us arrange a thorough demonstration for the members of Your Department!

Mine Safety Appliances Company
Braddock, Thomas and Meade Sts.
Pittsburgh, Pa.

Talking with headquarters over two-way radio is like using any telephone. Differences are that there is no central operator to arrange the connection and that most radio telephones have dynamic phones which transmit the tone of voice far more faithfully than ordinary magnetic telephone equipment.

ELEVEN DEPARTMENTS FIGHT HOTEL FIRE

THROUGH sub-zero weather ten fire departments scurried to Burlington, Vermont, shortly after two o'clock in the morning of February 15. A seven-story hotel was burning and the fire threatened to spread to adjoining buildings making the worst fire in years. The cry of help from Burlington had caught the ears of five volunteer departments, four part paid departments and the Fort Ethan Allen military brigade. Five of the departments that rushed aid came over 20 miles and one made a run of 67.

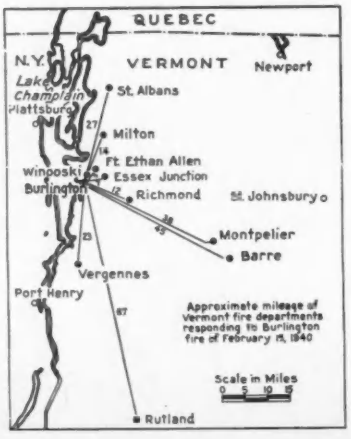
A bellboy who also acted as night watchman had discovered the fire in the hotel while making his two o'clock round. It was on the third floor of a four-story section in the back of the building, burning briskly in a jog off a main corridor. The jog led to a maids' rubbish room and a public toilet. The bellboy immediately sounded the local floor alarm to awaken sleeping people. There were 160 guests that night. As the alarm started ringing he rushed off to the lobby to notify the fire department. The night clerk was there and turned in the alarm. Meanwhile the bellboy went back to an elevator and ran it up and down rescuing the hotel guests. The fire was remote from the elevator shafts, and he seems to have had ample time to get all guests from the upper floors in the front section.

The first arriving firemen devoted all their efforts to life saving, making sure that everyone was out of the building. A few were trapped in the back section and had to be taken down ladders. As only one ladder truck, an 85-foot aerial, was available, this work proceeded slowly. Many in other sections were led through smoke filled halls and down stairs by police and firemen. A careful job of checking every occupied room made certain that every life was saved.

By the time rescue work was completed and firemen could concentrate on fighting it, the fire had spread upward through partitions and entered the attic space of the four-story rear section in which it started. For a while it seemed that firemen might stop it there, but it spread slowly and persistently through the walls and eaves where it was protected from the tons of fire department water and finally reached the front, 7-story section. There it became spectacular. The combustible construction of the building made it impossible for firemen to prevent complete destruction even though armed with a good water supply and plenty of pumping equipment. The contents of several large stores that were located on the ground floor of the building materially added to the loss. One of these was the local outlet for Sears Roebuck and Company; another was a member of the J. C. Penney Company chain.

Cold grey dawn in Burlington, February 15, found chilly firemen pouring water into the ruins of the 25-year-old Milner Hotel. Fire started at 2:00 in the morning. The efforts of eleven fire departments failed to put it out until the building was a total wreck.

Although unable to save any of the Milner building, firemen kept the fire from spreading to immediately adjacent property. Salvage covers were used to good effect in a clothing store next door which was subject to the hazard of smoke and water damage. Other stores nearby lost several days' business after it was out. Fear that the brick shell of the Milner might topple caused municipal authorities to close that neighborhood until it could be made safe.



In making his report of this fire Chief Newton Lavery of the Burlington Fire Department says that the hotel management had always been cooperative toward the fire department. However, he observes that this type of building should have automatic sprinkler protection, which would hold the fire in check and also give the fire department early notification. Other fire protection measures desirable would be a supervised automatic fire alarm system and watchman supervisory service. Had there been fire-wall separation between the four-story section at the rear and the seven-story section, the fire would probably have been confined to the part of the building where it started. Inadequate exit arrangements made it necessary for the fire department to rescue people on upper floors. This time could have been used to advantage in gaining early control of the fire.

The Milner Hotel building alone was worth nearly $200,000. Including contents, the fire caused over a quarter million dollar loss.

MANHATTAN Fire Hose

For regular and heavy duty service made untreated or Mildew-Proof treated.

MANHATTAN
Radio-Active Treated Fire Hose

Mildew-Proof — Freeze-Proof
Rot-Proof — Flat-Folding

Careful drying *not* necessary.
Ready for use and immediate re-use.

Write for special bulletin.

THE MANHATTAN RUBBER MFG. DIVISION
OF RAYBESTOS-MANHATTAN, INC.
Manufacturers for Over 45 Years
53 Townsend Street — Passaic, New Jersey

New Members During March

LAST month ten fire companies submitted application blanks and joined the roster of departments that are members of the VOLUNTEER FIREMEN'S SECTION. In addition 55 companies with 1319 men renewed their memberships. The total membership is now 695 departments with 15,100 men. Listed below are the ten companies, including one industrial brigade, newly enrolled.

Arlington Heights Fire Department, Arlington Heights, Illinois.

Chicago Screw Company, Chicago, Ill.

Gas City Fire Company, Gas City, Indiana.

Falmouth Fire Department, Falmouth, Massachusetts.

Long Beach Volunteer Fire Department, Long Beach, New York.

Montauk Fire Department, Montauk, New York.

Selah Volunteer Fire Department, Selah, Washington.

Sumner Fire Department, Sumner, Washington.

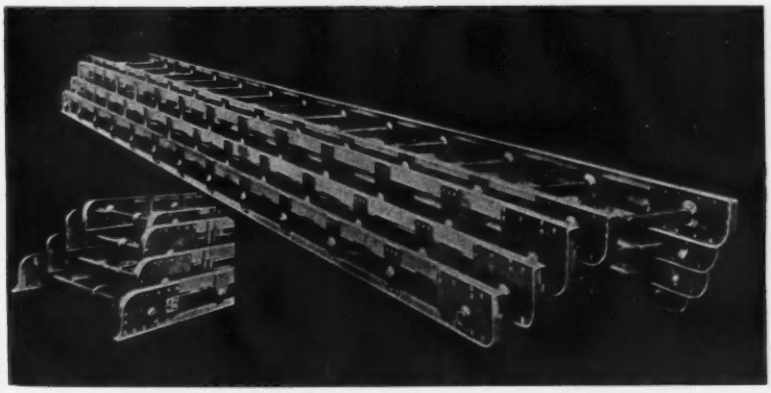
Romney Fire Department, Romney, West Virginia.

Flin Flon Fire Department, Flin Flon, Manitoba.

YOU will want the new 136-page book "National Fire Codes for the Prevention of Dust Explosions." Safe methods are described for fighting fires in some common flammable and explosive dusts. The book is illustrated and copies may be obtained for 75 cents each from the National Fire Protection Association, 60 Batterymarch Street, Boston, Mass.

NEW radio telephone equipment has been ordered from Western Electric Co. for the motor apparatus of the Washington, D. C., Fire Department. The new equipment will further increase the range of their radio system.

KOROSEAL, rubber-like material made from coke, limestone and salt by the B. F. Goodrich Company, Akron, Ohio, is now being used for swivel gaskets in municipal and industrial fire hose. The material is claimed to hold several advantages over rubber among which are the smooth glazed surface which makes leakproof hand tightening possible, and durability to age as well as wear. The new gaskets are being supplied as standard on all Goodrich Double Jacket municipal hose.



A new four-piece aluminum extension ladder for fire departments has been developed by the Aluminum Ladder Company, 376 Adams Street, Tarentum, Pa. It weighs only 165 pounds yet will extend 45 feet. Unextended it measures only 15 feet, short enough to be carried on a regular piece of apparatus. It can be readily handled by a small crew.

YOUR NEW FIRE TRUCK DESERVES the BEST

SPECIFY a TRAFFIK-KING SIREN AND OSCILLATING LIGHT

FEDERAL ELECTRIC Co. Inc.
8717 South State St., Chicago, Ill.

The "Model A" Super
Which Every Volunteer Fire Department Should Know About

Both 1 Quart and 1½ Quart Sizes

Every volunteer Fire Department should know the exclusive qualities of this first-aid extinguisher which experience shows should be the first to be carried into any fire because:—

FIRST:—
It is safe to use on electrical fires. Fyr-Fyter fluid is not only a powerful fire extinguisher fluid, but a most certain insulation—safeguarding the operator against serious injury or possible death from electrical contact.

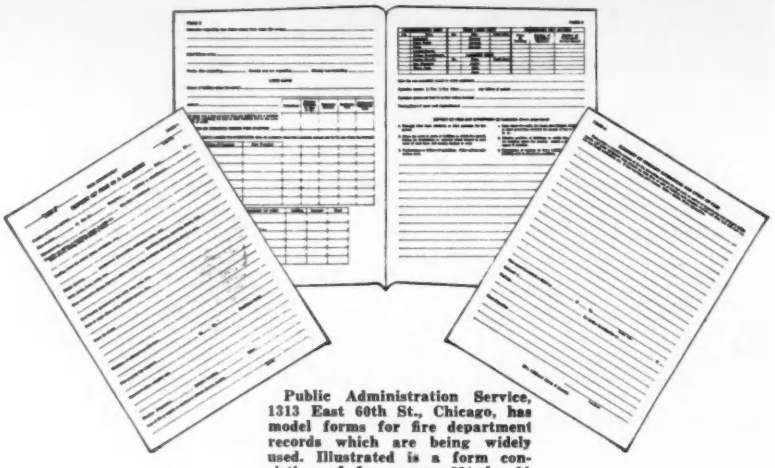
AND SECOND:—
It is effective on concealed fires in walls and other "hard to reach" locations and is effective also on fires in greases, oils and the more flammable liquids.

SALESMEN WANTED

If you are interested in adding to your income by spare time work or in building a permanent business for yourself without investment in stock, fixtures, etc., write for our new Dealer's Plan to

THE FYR-FYTER COMPANY
Dept. 20-52 — DAYTON, OHIO

A REPORT ON THE FIRE



Public Administration Service, 1313 East 60th St., Chicago, has model forms for fire department records which are being widely used. Illustrated is a form consisting of four pages 8½ by 11 inches, Report of a Fire in a Building, $2.50 per hundred.

MANY fire departments are keeping excellent day to day records of alarms, and on important fires are making a circumstantial written report. There are many small fires which have features of interest which should be made a matter of record. Large fires are important enough to be given more than a perfunctory notation in the department journal.

When a department does an especially creditable job of fire fighting there should be some record to show for it. The records are valuable for lesson material if the department is holding classes in fire fighting strategy, and they are useful to the chief as a means of seeing after the fire if every company performed as they were expected.

The N.F.P.A. department of fire record is very glad to get the many fine reports it is receiving daily of interesting fires or large fires prepared by fire departments all over the country. These are very helpful in the preparation of fire record statistics on fire causes, occupancy hazards and the performance of protective apparatus.

The fire department of Fayetteville, Arkansas, assisted by the neighboring volunteer fire department of Springdale, fought a fire in the principal mercantile district on January 15, with the thermometer at 18° F. during the extreme cold weather which hit the South this winter. For one thing, the fire was well handled. For another, an excellent report on the fire was sent to the N.F.P.A. by Captain Edward Wages. The scene of the fire was an old two-story brick block housing a theatre and department store. The alarm came in at 1:20 o'clock in the morning. The fire had good headway and had ventilated itself through the rear of the building when the department arrived.

Reproduced below is the sketch accompanying the report, just as it was made up by the fire department. This well illustrates how important it is for a fire report to have a sketch. It will be noticed that maximum use was made of the water supplies and pumping equipment available.

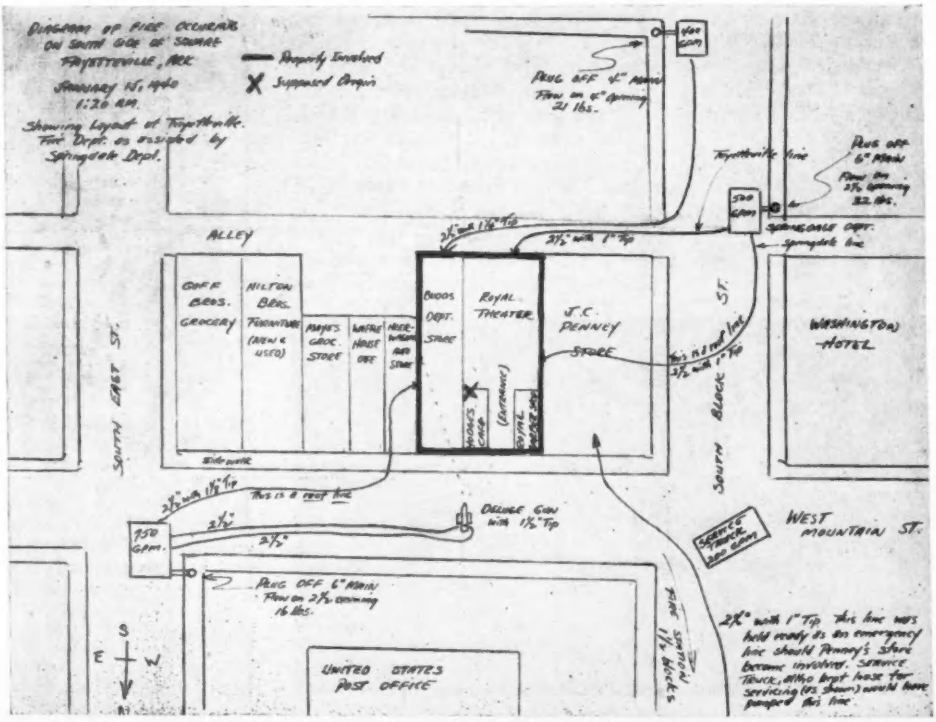


Diagram of Fire Occurring on South Side of Square Fayetteville, Ark. January 15, 1940 1:20 A.M.
Showing Layout of Fayetteville Fire Dept. as assisted by Springdale Dept.
Property Involved
Supposed Origin
ALLEY
GOFF BROS. GROCERY
HILTON BROS. FURNITURE (NEW & USED)
MAY'S GROC. STORE
MAYBE HOUSE OFF
HOUSE WITH AUTO STORE
BOOTS DEPT. STORE
ROYAL THEATER
BOOTS SHOP
ROYAL CANDY KITCHEN
J.C. PENNEY STORE
WASHINGTON HOTEL
SOUTH EAST ST.
SOUTH BLOCK ST.
WEST MOUNTAIN ST.
400 GPM
500 GPM
750 GPM
SERVICE TRUCK 250 GPM
DELUGE GUN with 1½" Tip
PLUG OFF 6" MAIN Flow on 2½" opening 21 lbs.
PLUG OFF 6" MAIN Flow on 2½" opening 32 lbs.
PLUG OFF 6" MAIN Flow on 2½" opening 16 lbs.
Fayetteville line
Springdale Dept. Springdale line
2½" with 1½" Tip
2½" with 1" Tip
This is a roof line
FIRE STATION 1½ BLOCKS
UNITED STATES POST OFFICE
2½" with 1" Tip this line was held ready as an emergency line should Penney's Store become involved. Service Truck, also kept busy for servicing (as shown) would have pumped this line.

Every report on an important fire should have a sketch. Note how this one from the fire department report tells the story of the department's operations. The block in which the fire started was two-story brick construction. The fire shows how such situations take all the man power, apparatus and water available.

Acme's New

All Purpose Gas Mask

The fireman wearing this improved mask is guarded against smoke suffocation. Does your present equipment give this protection? You can tell in a minute. Send for the Acme Canister Smoke Tester, which will be mailed postpaid with instructions. FREE.

protects the Fireman against Carbon Monoxide and Other Gases—and also against Suffocation by Smoke.

Five points of great importance that distinguish the Acme All Purpose Mask from all others:

1. Effective protection against Lethal Gases and Smoke Suffocation.
2. Smoke cannot be breathed through this newest development! This includes smokes of finest particles. Firemen must be protected against Suffocation by Smoke. (Send for Acme "Canister Smoke Tester" offered free—test your present canisters and feel better if they do give protection against Smoke Suffocation.)
3. Longer Life of Canister: The quality and quantity used provide definitely for long service.
4. Full Vision for Wearer: Acme's first major contribution in better Gas Masks —In Acme Masks, Firemen can SEE.
5. A harmless Warning Agent notifies the wearer, unmistakably, when carbon-monoxide protection begins to weaken and he must get to fresh air.

Send for Folder M401, which gives full description. Address as below.

ACME

PROTECTION EQUIPMENT CO., INC.
3614 Liberty Ave., Pittsburgh, Pa.

MATERIAL FOR CLEAN-UP CAMPAIGN

THE annual observance of a spring fire prevention and clean-up campaign is sponsored by the N.F.P.A. To assist in local programs, there are numerous regular and special publications which are available to assist local committees in their educational work. A selection of some of the more useful items follows. Local committees may also secure assistance in arranging campaigns by writing to Mr. T. Alfred Fleming, Chairman, N.F.P.A. Committee on Fire Prevention and Clean-Up Campaign, 85 John Street, New York, N. Y. Order the following publications from N.F.P.A. Executive Office, 60 Batterymarch Street, Boston, Mass.

POSTERS

Fire Prevention Clean-Up Campaign Posters, size 12 by 16 inches in three colors with space at the bottom which may be used for local imprinting if desired are available at $1.50 per hundred; $10 per thousand. A few of the titles are: "Clean This Up," "Crush Your Cigarette," and "Fight Fire with Forethought."

COLORED FOLDERS

Keep Your Home from Burning. How fires start and spread—what to do in case of fire and how to put fire out. The above folders are 3½ by 6½ inches illustrated, $1.50 per hundred.

Flying Destruction. The shingle roof hazard.

Make Your Chimneys Safe. Rules for chimney construction—smoke tests for old and new chimneys.

100 Conflagrations since 1900. A fire record of principal conflagrations occurring in the United States and Canada since 1900. Twenty-six illustrations; tables which describe fires by showing: dates, locations, property destroyed, factors responsible and reported loss. 25 cents.

Fire Record of Dwellings. An illustrated pamphlet (1936) describing causes of dwelling fires, trends of dwelling losses, average dollar loss per fire, and building and contents losses. Contains charts and statistics. 20 cents.

Fire Exit Drills and Alarm Systems. Contains material on alarm systems; fire exit drills; Suggested Exit Drill Code for Industrial Establishments; Suggested Fire Exit Drills for Hospitals, Corrective Institutions, Sanitariums, and Schools. 10 cents.

STOP FIRES FAST WITH

INDIAN

FIRE PUMPS

Easier - Quicker - Cheaper

There's nothing gets at those bothersome small fires in roofs, chimneys, rooms, partitions and buildings like an INDIAN FIRE PUMP. Uses only clear water. No inspection necessary. Always ready. Sling on back or carry by handle. Easy pumping throws strong pressure stream. Quickly refilled at any water supply.

No Hose To Lay — Minimum Water Damage

INDIANS are the greatest all 'round fire fighters on the truck. Use them to do more jobs at less cost. That's why departments all over the U. S. say they wouldn't be without them. Inexpensive, too. Let us send testimonials from fire department users.

Write for catalog and price list

D. B. SMITH & CO.

413 Main St., Utica, N. Y.

PACIFIC COAST AGENTS:

Hercules Equipment & Rubber Co.
550 Third Street
San Francisco, Calif.

Western Loggers' Machinery Co.
302 S.W. 4th Street
Portland, Oregon

Mill & Mine Supply, Inc.
2700 Fourt Ave., South,
Seattle, Wash.

Roy G. Davis Co.
617 East Third St.,
Los Angeles, Cal.

When householders make unskilled additions to their wiring, make unsafe repairs to appliances and tamper with fuses, they do not realize that they are creating fire and shock hazards. Fire departments can perform valuable service in their communities by warning against such practices.

The parts of the wiring system most commonly neglected in homes are the attachment cords. Cords that are badly worn should be replaced. Suggest to householders that all cords purchased should be approved by Underwriters' Laboratories as indicated by the bracelet - like labels wrapped around the cords.

BORROW THIS FILM

"Preventing Fires Through Electrical Safety"

This film illustrates electrical fire hazards commonly found in homes, and shows how they may be avoided. If meetings of civic groups, school groups, scouts, firemen or electricians are arranged during your clean-up campaign, or at any other time, the film can serve a useful purpose. This 16mm film takes 20 minutes to show.

Copies can be borrowed from 10 locations. See addresses in February, 1940 edition of VOLUNTEER FIREMEN or write to the address below.

PUBLIC RELATIONS COMMITTEE
INT. ASSN. OF ELECTRICAL INSPECTORS
85 JOHN STREET, NEW YORK, N. Y.

$10.00-$3.00-$2.00 EACH MONTH

PYRENE PRIZE LETTER CONTEST

THREE firemen a month are taking home cash prizes easily won by telling their experiences with approved types of fire extinguishers to the judges of the Pyrene Prize Letter Contest. The contest is open to all members of fire departments and organized industrial brigades.

There must be a case in your experience where an extinguisher did good work in stopping a fire. It can be a prize winner. To win one of the prizes you don't need any fancy writing ability. Just tell the story in a letter, giving the facts in your own way. Send your entry to the address given in the contest rules below.

FIRST PRIZE—$10.00

JOHN W. LANGDON, *Chief*
Rockport Fire Department
Rockport, Indiana

Heat Melted the Light Bulbs

On Saturday night, February 24, the film being projected in our local motion picture house broke. It caught fire before the operator could shut down the machine. He ran out, closed the door of the booth, and called the fire department.

In our volunteer organization only one man remains in the hose house. He drove to the theater and arrived before the fire had broken out of the projection booth. Armed with a 2½-gallon soda-acid extinguisher he opened the door. The room was a mass of flames from the burning film. The heat was so intense it melted the light bulbs.

Other firemen arrived almost as soon and found him fighting the fire with the extinguisher. They ran for more, but, before he had used up the contents of the one he had, the fire was out.

The proprietor was profuse in his thanks. The damage was so slight that he was able to resume business the next day. Had we had to use a hose line, both of his machines might easily have been ruined.

SECOND PRIZE—$3.00

MILT SAUNDERS
District No. 3, Multnomah County Fire Department
Multnomah, Orgeon

Blazing Truck Extinguished

The big clock on the wall registered 5:31 P. M. Fireman Miller and I were interrupted in our cooking by a frantic voice shouting, "Fire, Fire!" The excited visitor informed us that a large truck was blazing in the Multnomah Fuel Company Supply Shed about three blocks away. The alarm sounded and the new No. 1 truck of the department pulled out with siren wailing.

"Grab extinguishers, start the pump and bring the booster," came the orders from Captain Woodley who had sized up the situation at once. Dense hot smoke was pouring from the door of the shed as four of us, equipped with two small extinguishers and booster line, went in. Deadly flame engulfed the entire front of a truck and there was great danger of the gasoline tank blowing up. Turning our carbon tetrachloride extinguishers on the bottom of the flames, we soon had the fire under control.

We learned afterwards that there were several barrels of gasoline and about five tons of coal stored in the shed. Wood was piled near the outside walls. If the fire had gone much further, there would have been great danger of the entire fuel yard going. Yet only the truck was damaged.

THIRD PRIZE—$2.00

HAROLD G. LANE
Anchorage Volunteer Fire Department
Anchorage, Alaska

Close Call at 1,000 Feet

A member of our department who is a mechanic for a local airline was a passenger in one of the planes recently. They had reached 1,000 feet when suddenly a fire broke out in the cabin. The battery lead had shorted and caused the trouble.

At first sight of the flames, our fireman calmly reached up in front of the pilot's seat for the plane's fire extinguisher. He shot its stream at the flames and soon had the fire out. Afterwards he disconnected the battery. The plane got down safely.

This fireman's quick and intelligent use of the extinguisher undoubtedly prevented a flaming crash. Only a thin panel separated the fire from the highly flammable fabric of the fusilage. Once the doped cloth got going the ship would be doomed.

This fire was another illustration of the wisdom of all airplanes carrying approved extinguishers. In many other cases, quite similar to this one, they have proven their worth.

HONORABLE MENTION

R. Q. BENNETT, El Centro Fire Department, El Centro, California.

E. BOYD HAWKINS, East Bethlehem Township Volunteer Fire Company, Fredericktown, Pennsylvania.

WILLIAM R. HARRING, Camden Fire Department, Camden, New Jersey.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.
2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 8th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

N.F.P.A. Membership for Your Company or Department

Membership with unusual advantages is available to fire companies and fire departments through the Volunteer Firemen's Section of the National Fire Protection Association. Here's the simple plan:

Your company or department applies for regular membership in the N. F. P. A. and pays the minimum $10 annual dues. When the application is accepted, the company or department begins to receive at headquarters the monthly bulletins and publications sent regularly to all members of the Association. Also comes a 100-page *Quarterly* Magazine (four times during the membership year), a volume of annual Proceedings (over 500 pages), a Directory of members, and an Index to printed publications. You thus build up a nice fire library. Membership also places at the disposal of the company or department the Information Service of the Association.

Only Through Membership Can You Get

VOLUNTEER FIREMEN

for Your Company or Department

The publications and services enumerated above are what regular N. F. P. A. members get for their $10 annual dues. The special membership plan of the Volunteer Firemen's Section provides that *in addition* you get VOLUNTEER FIREMEN magazine for the men in your company or department. (The $10 minimum dues allows you to enroll up to 10 men to receive the magazine: $1.00 per year extra for each man in excess of 10 enrolled). VOLUNTEER FIREMEN is mailed to each man's home address.

USE THIS COUPON FOR SPECIAL MEMBERSHIP PLAN

If your company or department is now a member, pass this coupon to some other company or department which might like to enjoy the benefits of this plan.

National Fire Protection Association, 60 Batterymarch St., Boston, Mass.:

Please send me a membership application blank. I am interested in your special membership plan for our company or department.

Name .....

Rank .....
(Chief, Sec'y, Capt., etc.)

Name of Company or Department .....

.....

Address .....

● Large or small—city or rural—your fire department needs the LaBour Fire Trailer. Large departments can use it differently than do small ones; in cities it's valuable for basement dewatering as well as for an extra booster in fighting fires where long runs of hose are necessary. Small towns can use it for rural fires, and also keep it to help or substitute for their regular pumping equipment in emergencies.

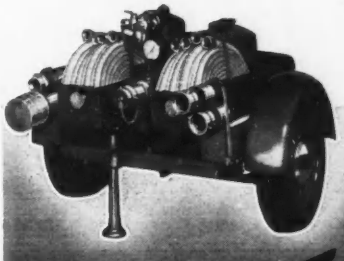
Any passenger car can pull this unit to the fire, for a quick acting universal safety clamp attaches to the bumper.

150 G. P. M. at 100 LBS. PRESSURE

The pump, driven by its own engine, delivers 150 gallons per minute against 100 lbs. pressure. It will draw from ponds or streams, and dirty water cannot harm the pump. Priming is quick and completely automatic; once the engine is started, the pump requires no further attention.

Full details are contained in Bulletin 47. Ask for your copy today.

THE LABOUR COMPANY, INC.
1559 Sterling Ave.
Elkhart, Indiana, U. S. A.



LABOUR FIRE TRAILER

What Does a Fire Cost?

A company built a modern industrial plant and, upon completion, the buildings, equipment, raw and finished materials were fully covered by insurance. The company felt secure from loss by fire.

One night fire broke out and, because of a DELAYED ALARM, the fire had reached great headway before the apparatus arrived. The buildings, though not completely destroyed, had to be rebuilt. But there was the insurance! This and plenty more was absorbed by rebuilding costs, insurance deduction of 20% because of depreciation, payment of bank notes due about the time the fire occurred, continuance of non-cancellable advertising contracts and the payment of salaries to high-power executives went on . . . in the meantime other employees were out of jobs. It required 178 days to rebuild and competitors got the company's business.

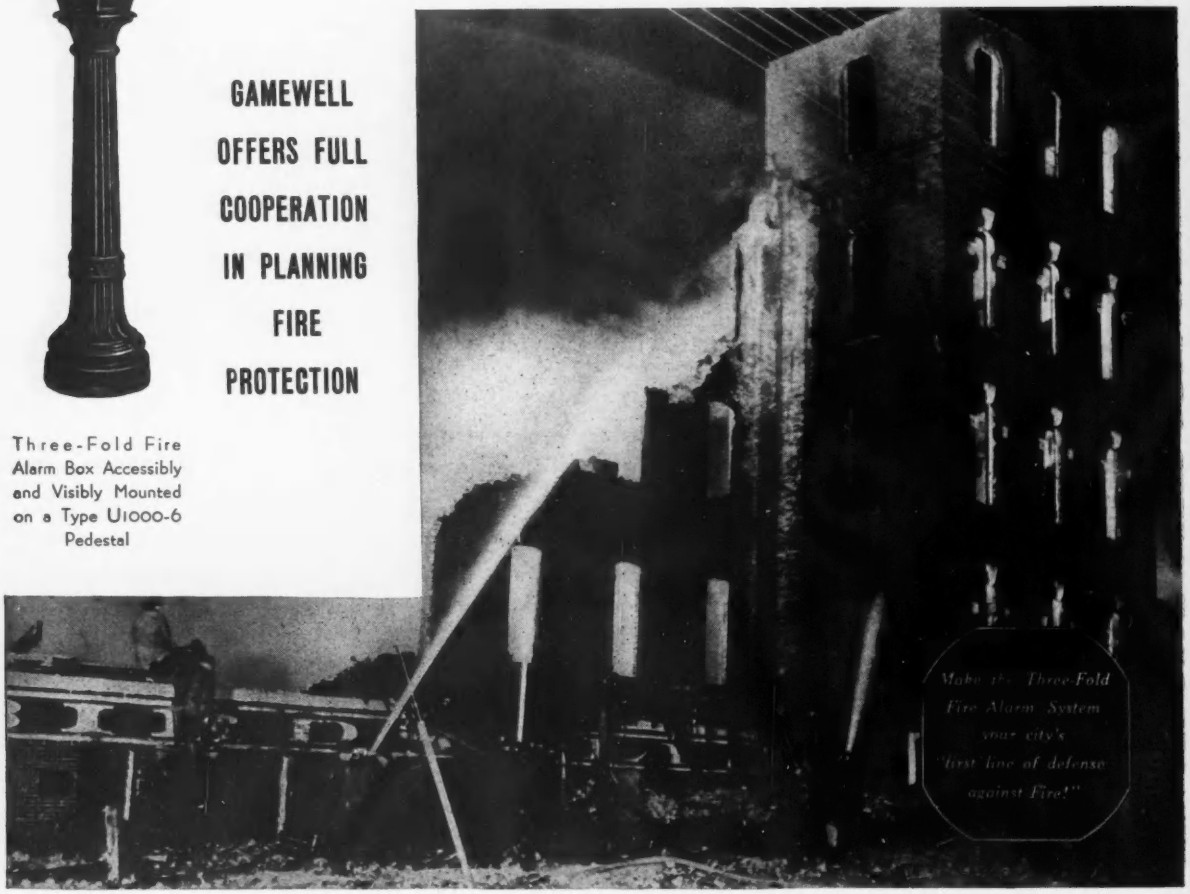
This is one of few instances where a fire-blasted building was rebuilt for, out of every 100 plants destroyed by fire, 43 do not resume business.

Such fire losses can be reduced simply by placing plenty of fire alarm boxes accessibly and visibly mounted.

Check up on conditions in your community.

GAMEWELL OFFERS FULL COOPERATION IN PLANNING FIRE PROTECTION

Three-Fold Fire Alarm Box Accessibly and Visibly Mounted on a Type U1000-6 Pedestal



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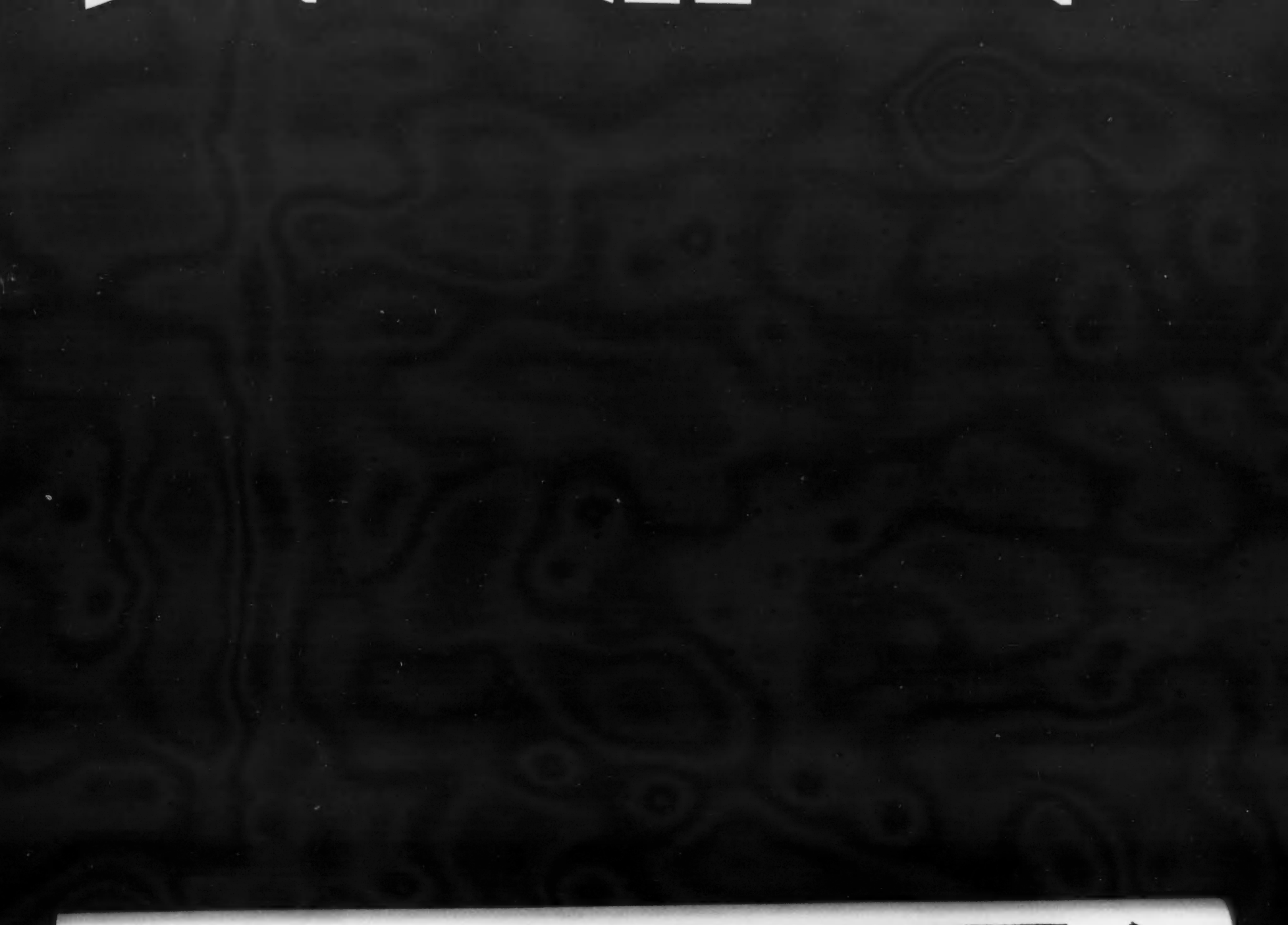
NEWTON UPPER FALLS, MASSACHUSETTS